



# Volunteer Lake Assessment Program Individual Lake Reports

## DODGE POND, LYMAN, NH

### MORPHOMETRIC DATA

Watershed Area (Ac.):	2,720	Max. Depth (m):	3	Flushing Rate (yr <sup>-1</sup> ):	28.3	Year	Trophic class	KNOWN EXOTIC SPECIES
Surface Area (Ac.):	23	Mean Depth (m):	1.8	P Retention Coef:	0.42	1982	OLIGOTROPHIC	
Shore Length (m):	4,200	Volume (m <sup>3</sup> ):	167,500	Elevation (ft):	829	2003	OLIGOTROPHIC	

### TROPHIC CLASSIFICATION

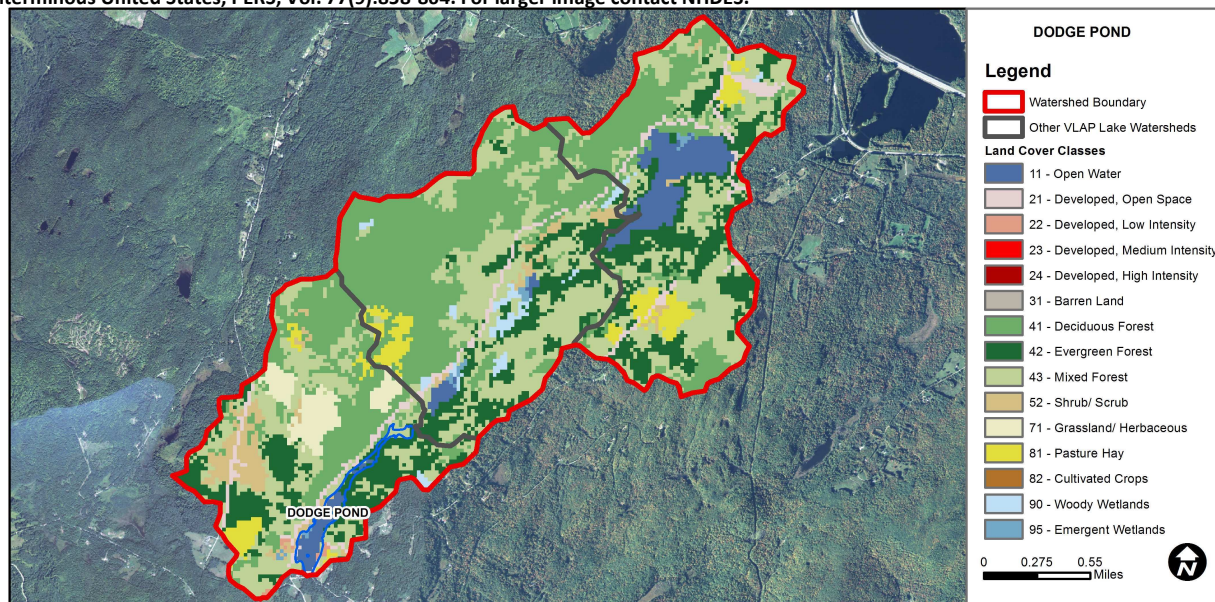
### KNOWN EXOTIC SPECIES

The Waterbody Report Card tables are generated from the 2012 305(b) report on the status of N.H. waters, and are based on data collected from 2001-2011.

Designated Use	Parameter	Category	Comments
Aquatic Life	Phosphorus (Total)	Slightly Bad	>/=5 samples and median is >threshold.
	pH	Good	At least 10 samples with 1 sample but < 10% of samples exceeding criteria.
	D.O. (mg/L)	Encouraging	< 10 samples and no exceedance of criteria. More data needed.
	D.O. (% sat)	Encouraging	< 10 samples and no exceedance of criteria. More data needed.
	Chlorophyll-a	Slightly Bad	>5 samples and median is > threshold.
Primary Contact Recreation	E. coli	Very Good	All bacteria samples <75% of geometric mean criteria, but not enough to calculate geometric mean. Or, all bacteria samples are < single sample criteria and calculated Geometric means are less than geometric mean criteria.
	Chlorophyll-a	Good	At least 10 samples with 1 sample but < 10% of samples exceeding criteria.

### WATERSHED LAND USE SUMMARY

Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J., 2011. Completion of the 2006 National Land Cover Database for the Conterminous United States, PERS, Vol. 77(9):858-864. For larger image contact NHDES.



Land Cover Category	% Cover	Land Cover Category	% Cover	Land Cover Category	% Cover
Open Water	4.67	Barren Land	0	Grassland/Herbaceous	2.53
Developed-Open Space	3.19	Deciduous Forest	31.46	Pasture Hay	3.63
Developed-Low Intensity	0.16	Evergreen Forest	18.5	Cultivated Crops	0
Developed-Medium Intensity	0	Mixed Forest	31.11	Woody Wetlands	1.27
Developed-High Intensity	0	Shrub-Scrub	3.07	Emergent Wetlands	0.36



# VOLUNTEER LAKE ASSESSMENT PROGRAM INDIVIDUAL LAKE REPORTS

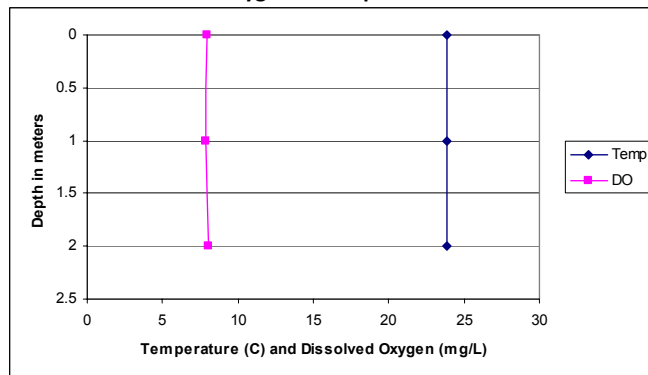
## DODGE POND, LYMAN, NH

### 2012 DATA SUMMARY

#### OBSERVATIONS AND RECOMMENDATIONS (Refer to Table 1 and Historical Deep Spot Data Graphic)

- 🔥 **CHLOROPHYLL-A:** Chlorophyll-a levels were average for most NH lakes and historical trend analysis indicates chlorophyll levels tend to fluctuate from year to year.
- 🔥 **CONDUCTIVITY/CHLORIDE:** Deep spot and tributary conductivity were slightly elevated and above the NH lake median.
- 🔥 **E. COLI:** Beach E. coli levels were well below the state standards for public beaches.
- 🔥 **TOTAL PHOSPHORUS:** Deep spot and tributary phosphorus levels were average for most NH lakes. Historical trend analysis indicates epilimnetic (upper water layer) phosphorus levels tend to fluctuate from year to year.
- 🔥 **TRANSPARENCY:** The Secchi disk was visible on the pond bottom during 2012 and historical trend analysis indicates transparency is relatively stable.
- 🔥 **TURBIDITY:** Deep spot and tributary turbidity levels were low.
- 🔥 **pH:** pH levels were sufficient to support a variety of aquatic life.
- 🔥 **RECOMMENDED ACTIONS:** Maintain current monitoring program to build a comprehensive data set to better assess lake quality. Conduct chloride monitoring to assess potential impacts of road salting.

#### Dissolved Oxygen & Temperature Profile



Station Name	Table 1. 2012 Average Water Quality Data for DODGE POND								
	Alk.	Chlor-a	Cond.	E. Coli	Total P	Trans.		Turb.	pH
	mg/l	ug/l	uS/cm	#/100ml	ug/l	m		ntu	
						NVS	VS		
Beach				8					
Deep Epilimnion	28.2	4.19	76.6		10	2.6	2.6	1.04	7.57
Inlet			74.9		10			0.79	7.47
Outlet			76.9		8			0.77	7.59

**NH Median Values:** Median values for specific parameters generated from historic lake monitoring data.

**Alkalinity:** 4.9 mg/L  
**Chlorophyll-a:** 4.58 mg/m<sup>3</sup>  
**Conductivity:** 40.0 uS/cm  
**Chloride:** 4 mg/L  
**Total Phosphorus:** 12 ug/L  
**Transparency:** 3.2 m  
**pH:** 6.6

**NH Water Quality Standards:** Numeric criteria for specific parameters. Results exceeding criteria are considered a water quality violation.

**Chloride:** < 230 mg/L (chronic)  
**E. coli:** > 88 cts/100 mL – public beach  
**E. coli:** > 406 cts/100 mL – surface waters  
**Turbidity:** > 10 NTU above natural level  
**pH:** 6.5-8.0 (unless naturally occurring)

#### HISTORICAL WATER QUALITY TREND ANALYSIS

Parameter	Trend	Explanation
Chlorophyll-a	Variable	Data fluctuate annually, but are not significantly increasing or decreasing.
Transparency	Stable	Data not significantly increasing or decreasing.
Phosphorus (epilimnion)	Variable	Data fluctuate annually, but are not significantly increasing or decreasing.

This report was generated by the NH DES Volunteer Lake Assessment Program (VLAP). For more information contact:

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